## ABSTRACT OF THE DISCLOSURE

An access point device and a technique for the access point device is for setting a channel of the access point device. The method for setting the channel of the access point device includes: a peripheral search for receiving information from peripheral access point devices, and searching channel numbers used by the peripheral access point devices; an optimal channel number decision selecting one of the channel numbers except for the used channel numbers, and deciding whether the selected channel number is an optimal channel number; and a channel setting for setting the selected channel number as a channel number when the selected channel number is the optimal channel number. As a result, the optimal channel number is automatically set so that the access point device can perform communication without being interrupted by the peripheral access point devices.